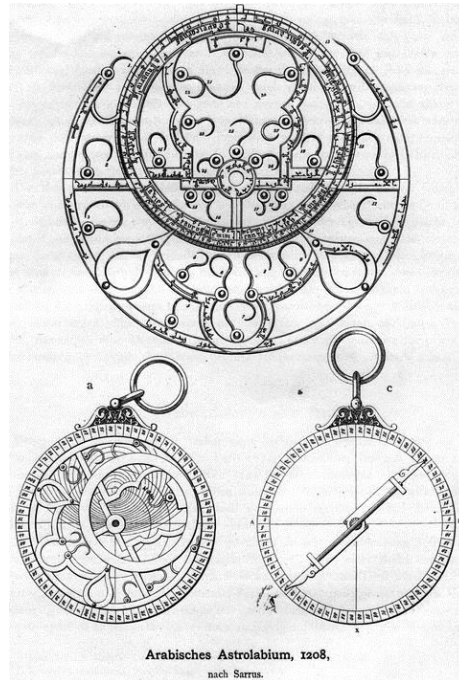


# The Age of Exploration

## By ReadWorks



For thousands of years, people have been fascinated with world exploration and discovering new places and cultures. Historically, one of the most efficient ways to navigate the world was traveling by sea. From the ancient Greeks to medieval Spanish kings, exploration was a major goal for governments because it offered the prospect of new commercial operations and trade routes. For example, Spanish ships could sail to China and bring back Chinese spices and silks (which were unavailable on mainland Europe) to sell to Spanish markets. Early explorers relied on a navigational system called “dead reckoning,” or calculating their position based on previous positions (like landmasses) to make sure they did not veer off course; however, this method could be an

inexact science. As exploration became more important for Europe's economic interests, advanced devices that made exploration easier and more exact were developed.

The "age of exploration" marked a new frontier for sea navigation. This epoch began in the 15th century when Portugal and Spain started to expand their commercial interests and trade routes across the oceans, resulting in the exchange of goods and sometimes even traditions. Sailors used new technologies to navigate across the world, including a device called the quadrant, a fan-shaped magnetic object that predicted the altitude of stars, the moon, and the sun in order to determine where a ship was headed. Another device was the compass, which used Earth's magnetic poles to point navigators north, south, east, or west. Time-keeping devices, like hourglasses, were important in calculating how far a ship had sailed. Early navigators also used maps, although these were not always accurate and were often written during the course of the exploration. These maps were then improved upon with new explorations.

It was an exciting time to be an explorer. Governments would pay men to navigate ships across the open seas and discover new lands. One of the most famous explorers was Christopher Columbus, the Italian navigator who set out to find a more efficient route to India and stumbled upon North America instead. At the time of his sailing, Columbus only had a few navigational instruments available to him, including the compass, an astrolabe (a device that predicted the location of stars and helped explorers determine their latitudinal or vertical position on a globe), a quadrant, and incomplete maps. Columbus's incomplete knowledge of world geography and the imprecise navigational devices he brought with him caused him to inadvertently discover North America and all the rich natural resources available there.

You can imagine the difficulties explorers had with the available technologies during Columbus's time when you think about Columbus's experience. He meant to travel from Spain to India, which we now know would have required him to sail first west, then south, then north. Instead, Columbus traveled west and believed he had reached the farthest place from Spain, the complete opposite side of the world: India. On the one hand, the tools' inaccuracies made exploration by sea inconsistent and unpredictable; on the other, explorers at the time had limited knowledge of the world's geography, which also hindered exploration of unknown territory. These issues, along with the financial risks involved, made it difficult for some governments and kings to agree to fund explorations during which their navigators could become irretrievably lost.

As time went on, more European countries began to explore the world. In the late 17<sup>th</sup> century, the United Kingdom joined the navigational tool race, developing modern tools such as the sextant and the octant, which replaced tools used by the earliest explorers. The sextant was used to determine the moon's distance from other celestial bodies, which made it easier for navigators to figure out the ship's longitude and effectively replaced the need for primitive time-keeping devices. The octant made latitudinal calculations much more accurate and was used in lieu of quadrants. These modern inventions arrived after much of the world had already been explored, but allowed ship captains to cut down the length of time they were at sea, and improved accuracy in route planning.

## A Crooked Election

Kyria Abrahams

Kelly is running for class president of Wright High School. Some of Kelly's classmates think elections are pointless. Kelly's best friend Maya doesn't believe in voting at all.

"I'm not voting," Maya tells her. "Voting is pointless."

"But if you don't vote, someone else will. And then they'll get what they want and you won't get what you want!" Kelly says.

"I don't want anything. I just want to be left alone." Maya responds.

Kelly is running for class president because she says she thinks the school can be better. She wants to see less meat served in the cafeteria and more vegetarian options. She also wants the school to stop bringing a live goat onto the field during football games.

"Kelly has good ideas, but won't be able to change anything," Maya tells her classmates. "She's just idealistic. No one can change anything."

Kelly's opponent, Roger, is running for class president of Wright High School because his brother was president last year. In fact, Roger has three brothers, and all three of them have been class president.

"I'm not losing to anybody," Roger tells his brothers. "Especially not a *girl*."

Roger has really nice banners professionally printed and hangs them around the school. Roger's banners say: "Roger Whitaker. The Right Man for the Wright Job." The phrase "right man" is a reference to the fact that Kelly is a girl. Roger says that girls can't be president because they cry too much. He only says this secretly to his brothers. He would never admit this opinion to his classmates.

"All Kelly cares about is that we have tofu in the cafeteria," Roger tells his classmates. "But I want to fix the broken doors in the bathroom!" Roger holds up a screwdriver as he says this and makes a grunting "man" sound.

The election banners were given to him as a gift by the Harrison kids. Their dad owns Harrison Sign Manufacturers and made the signs for free.

"Just make sure that when you get elected—and we are confident that you will—you tell the school that they need new signs." They shake hands and give him the free

signs, which suddenly don't seem so free.

Roger looks around the school and sees that they do, in fact, need new signs. The exit sign above the main door is cracked. The sign above the library just says "Librar." The menu next to the school cafeteria is so old it says you could get a peanut butter and jelly sandwich for 50 cents.

So, maybe it is a bit unfair to take something from a student who's going to vote for you. But Roger figures they have a good point about the signs.

Meanwhile, Kelly has been running around the school putting up signs of her own. They are all handmade from construction paper with fresh flowers on them. They say, "Make the school beautiful. Vote Healthy for Kelly."

Maya tells Kelly they look nice, but she doesn't think they'll do anything. "It's just lipstick on a pig," she says. "Just because you make it look nice doesn't mean it's not still a pig."

Kelly's handmade signs make Roger nervous, because they seem more honest and down-to-earth. Although his signs are really nice and professional, it's also obvious that they cost money. Roger feels like the students don't relate to him.

He wants the other students to think he's just like them, so he organizes a barbecue during school lunch hours with free hot dogs. Actually, it's the Harrison brothers' idea. They even get him a deal on the hot dogs, from their cousin's supermarket, of course.

A few kids come by, but Roger also notices that a good amount of students stay in the cafeteria, eating food they brought from home. He can't figure out why someone would want to eat a stale sandwich when he's offering free hot dogs.

The hot dog giveaway is definitely a flop. Roger goes home dejected and sad.

The next day, the school holds a debate between the two candidates. The debate is moderated by their civics teacher, Mrs. Graham.

Roger and Kelly sit on stage, opposite each other. The auditorium is filled with students, all of whom will have the opportunity to vote. All the students are watching with great interest, as this is how they will make their decision. One wrong answer today and it could mean losing the presidency.

Mrs. Graham asks the first question.

“As class president, how would you see fit to spend the school’s extra money?”

Kelly answers first. “Well, I certainly wouldn’t be spending our money on expensive signs and hot dogs,” she says.

The audience gasps. This is a low blow. It’s surprising that Kelly would say something like that.

Roger looks into the audience and sees the Harrison brothers sinking down into their seats.

Kelly continues, “I would like our school to be healthier, and I know we have many students who are vegetarian. They don’t have many options for lunch, and if they forget to bring lunch from home, sometimes they don’t eat lunch at all!”

At this, at least 50 students stand up and applaud. Even Maya stands and applauds, although she rolls her eyes a little, too. The other students join in the cheering.

Of course, a few students start booing, just to be jerks.

“Eat more bacon!” says one, cupping his hands around his mouth so the sound will carry.

“Eat a vegetarian!” says another, laughing and throwing pieces of paper.

“Okay everyone, that’s enough!” the moderator says from stage. The students who are booing the vegetarians just look like troublemakers now.

Roger looks into the audience. He finally realizes how many students are vegetarian; he has never thought to find out before.

“What about you, Roger? What will you spend money on?”

“Well, I would like to have a new sign for the cafeteria,” he says. “And that could certainly include any vegetarian options that the school may end up providing.”

“Oh please! Without me to push for it, the school will never change its menu,” Kelly says. “Roger offers empty promises. And he thinks he is better than me because I’m a girl!”

The students start to applaud and Roger watches the Harrison brothers sneak out the back door.

When the debate is over, Roger can tell that he lost. His failure is palpable; he can feel it. Students clamor around Kelly in a group, hugging her and telling her how they

can't wait for the new lunch menu.

Only a few people come up to Roger.

"I liked your nice sign," says Peggy, pushing her glasses up on her nose and squinting.

"Thanks," said Roger. "Can I count on your vote next week on election day?"

"Oh, that," Peggy says. "Well, actually, I'm voting for Kelly. I just wanted to be nice to you."

After school, the Harrison brothers are waiting outside to talk to Roger. He notices they are carrying some of Kelly's signs.

"We're going to have to withdraw our support," Boyd Harrison tells him.

"We just don't think you look like the winning candidate," Trent Harrison says. "And we really need to get behind someone who can help bring our dad more business."

"What are you talking about?" Roger says, angrily. "I was your guy! You supported me! I thought we were friends."

"Yeah, friends. Well, about that...You see, it's just that Kelly will bring in a lot more business for our dad's company," says Trent.

Boyd nods in approval. "It's nothing personal. You're a nice dude and all. But Kelly has a little more...*spirit*."

"Kelly? Oh please!" Roger is yelling now. "Her signs are all handmade! Didn't you see them? It's just hipster junk!"

"Oh, yeah, you noticed that? We went for a more 'indie' feel with these," Trent says.

"Tried to make them look handmade," Boyd interjects. "The hipsters love that. We're glad you noticed."

Kelly is coming out of the school now, and the Harrison brothers walk away from Roger without saying a word. Each brother puts an arm around Kelly.

"How's our best girl?" they ask.

Kelly smiles. "Doing just great now," she says. "Now that Roger looks like a woman-hating meat-eating loser."

"We've got this election in the bag," Boyd says. "A vegetarian bag, that is."



Trent holds up a bag of veggie burgers. “We’ve even been eating these at lunch, showing all those health-conscious kids that we’re one of them.”

“Well, you sure do look trustworthy now, don’t you?” Kelly says, laughing. “But do you have any real food? I’m so sick of this vegetarian junk. My stomach is killing me!”

“You bet we do,” says Boyd. “In fact, we have a whole bunch of hot dogs left over from Roger’s barbeque yesterday. Let’s go to our house and have dinner.”

“By the way,” Kelly says, “How did you convince people not to go get delicious free hot dogs? I think he could have really turned people to his side with that.”

“It was easy,” Boyd says. “We started a rumor that Roger left the hot dogs out in his car overnight. Nobody wanted to get sick. He was so depressed; he just left everything sitting there. We grabbed all the leftovers and took them back home.”

“That’s brilliant,” Kelly says. “I can’t thank you enough!”

“Well, you won’t have to thank us once you’re elected. Just make sure the school uses our dad’s business. And, oh yeah, when the cafeteria goes vegetarian, you know which veggie burgers are the best choice.”

Boyd dangles the bag in front of her and for the first time, she reads the label: “Harrison’s Burgers.”

“Victory has never tasted so sweet,” Kelly says.



# San Francisco, the City by the Bay

Elaine Mao



One of the main defining geographical features of California is the proximity to the Pacific Ocean, which runs along the entire length of the state's western border. Throughout California's history, the Pacific Ocean has played a central role in influencing the development of cities. Even today, all of California's largest cities lie near the ocean: Los Angeles, San Diego, San Jose, and San Francisco, in order of population size. San Francisco, in particular, owes much of its history and development to its location on one of the world's greatest natural harbors, the San Francisco Bay Area. Due to its particular location, San Francisco has become an established maritime commerce center and one of the largest cities in the United States.

The San Francisco Bay Area is enclosed by land on the north, east, and south sides. To the west, there is a waterway opening to the Pacific Ocean. This waterway is known as the Golden Gate, and it is spanned by the Golden Gate Bridge. The city of San Francisco lies on the northern end of the San Francisco Peninsula, which is the strip of land that encloses part of the west side of the bay, partially separating the bay from the Pacific Ocean.

During the early period of European exploration, the coastal regions were the first areas of California that explorers came across. This was because explorers typically sailed to the Americas, so naturally the coastal regions were more easily accessible to them. However, San Francisco was a notable exception to this rule. Historians believe that San Francisco's

geography and foggy weather made the bay difficult to notice. Because the entrance to the bay was so narrow and obscured by fog most of the time, explorers failed to discover it until a Spanish expedition accidentally came across it in 1769. They were actually travelling north by land in an attempt to find Monterey Bay. It was a full six years later before explorers entered the San Francisco Bay by ship.

Initially settled by the Spanish, San Francisco was ceded to Mexico after Mexico won its independence from Spain in 1821, and in 1848 the United States took control of the region after the Mexican-American War. During the same year, the California Gold Rush was starting. It was during this period that San Francisco was established as a maritime center for the territory. The state saw a huge population boom as prospective miners began to flock to the state. In 1848, 6,000 people came to California, and in 1849 at least 80,000 arrived by land or by sea. To meet the demands of the growing population, cargo ships flooded through the Golden Gate, carrying food, tools, clothing, building material, farmers, businessmen, and more people looking to take advantage of the gold rush. The San Francisco Bay was designated as an official port of entry for ships bearing foreign goods and was in a prime location for access to gold country. Between January 1848 and December 1849, the population of the city of San Francisco grew from 1,000 to 25,000.

After the gold rush, San Francisco was the largest city in the United States west of the Mississippi until it was overtaken by Los Angeles in 1920. However, the city continues to support a large urban population and owes much of its success to both its history and unique location. The city's largest industry is tourism, due to its many landmarks and frequent portrayal in pop culture. In particular, the city is known for its hills, the iconic Golden Gate Bridge, and its waterfront fishing attractions (such as Fisherman's Wharf). San Francisco is also an important center for banking and finance—partly due to the legacy of the California Gold Rush, which established the city as a center for commerce.

From the days of early European exploration, through the chaotic frenzy of the California Gold Rush, and into modern day, San Francisco's development has been influenced greatly by its location on the San Francisco Bay.